UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Messenger

DATE: MAY 5 1980

HWS file
147626

SUBJECT: Site Inspection and Environmental Survey of Chemical Recovery Systems, Inc., Elyria, Ohio

FROM: Leon F. Acierto
Engineering Unit II

TO: Files

On April 23-24, 1980, I and William Albrecht and Dawn Tharr, both of the National Institute & Occupational Safety & Health (NIOSH), Hazard and Technical Assistance Branch, conducted an inspection and environmental survey of Chemical Recovery Systems (CRS). Dan Watson and his technician, EDO, were on hand to asist in the leachate sampling process. Melanie Toepfer, U.S. EPA, Region V, was also briefly at the site on April 23, 1980, in the afternoon. She intended to use an LEL meter (explosivity meter) which she brought with her from Chicago. However, the gas cylinder which she had sent to EDO earlier to be used for calibrating the instrument had not arrived on time. She improvised by using a meter from EDO's storeroom.

The following are observations I made and other highlights:

1. Upon arrival at the plant, we met briefy with Mr. James Freeman, company president. I introduced the people from NIOSH and briefly stated our objectives and what we would be doing during the two-day survey.

2. The distillation unit located near the river was shut down during the entire survey. This particular unit was pointed out before as a possible source of excessive organic fume emission in additon to other sources. Bob Spears of CRS indicated that the company may not re-start this particular unit again due to high cost of operating it.

3. Except for the shutdown of one distillling unit, the general conditions of the plant including the drum and bulk storage areas remain practically unchanged from that observed during the February 1980, survey (copy of trip reports attached). Strong chemical smell was apparent, leachate and runoff were observed coming from the facility and rusty and leaking drums were also observed. Mr. Freeman claims that he cannot find anybody that would accept the excess wastes accumulated at this site.

4. Sampling of ambient air using charcoal tube personal samplers was performed with the help of NIOSH personnel. Portable fume emission detector and explosivity meters were also used in and around the still buildings and storage areas. The ambient air sampling using the charcoal tube samplers was done during the duration of the 4:00 pm to 12:00 pm shift of April 23 and again during the 8:00 am to 4:00 pm shift of April 24.

5. A total of 18 air samples were collected - 4 area samples and 13 personal tube samples.

6. Three sources of water/solution discharges were sampled - discharge from an unexposed sewer pipe leading from the facility, leachate leading from the property into the area bounded by a boom installed by the company in the Black River, and leachate coming out from behind the distillation unit close to the Black River.

7. No explosive readings were obtained during the survey. Organic fumes were detected using an ionization meter around the drum and bulk storage areas. Also, the steam-like emission from the distillation unit which was in operation, was found to contain 200-250 ppm organics using said meter.

A complete report including the analytical results of the ambient air samples will be forwarded to U.S. EPA by NIOSH. The estimated completion date of the analyses is May 14, 1980. The water samples will be analyzed for organics at CRL.

Recommendation: U.S. EPA should proceed with the RCRA and/or CWA case.

cc: Bryson
Fenner
Muno/Miner
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Leder/HMS File

8 FEB 1980

Inspection of Chemical Recovery Systems, Inc.
Elyria, Ohio

Leon F. Acierto
Engineering Unit II

File

On February 5, 1980, I and other U.S. EPA personnel (Frank Biros, Task Force, HQ., Gene Meyer, AHMD, Dan Watson, S&A and Melanie Toepfer, Air Branch) inspected the subject facility. We also spoke with the president of the company, Mr. James Freeman. He was very cooperative in responding to our questions. The following are observations I made and other highlights:

1. Mr. Freeman indicated that the most commonly handled chemicals at this plant include MEK, trichloroethylene, methylene chloride, toluene, etc. These belong to the family of ketones and chlorinated hydrocarbons.

2. Sludge generated by the recovery process is about 10,000 gals a week. Freeman indicated he has a problem finding a suitable facility other than Robert Ross, to accept the waste. Consequently, a high inventory of sludge in the plant is occupying a lot of space and getting to be a problem for him.

3. Plant uses Rodney and Brighten distilling units. One of the units is housed in a building very close to the Black River. This unit is in poor condition and appeared ready to disintegrate.

4. Chemical smell was very noticeable at the site specially close to where the distillation units are. This is definitely a hazard to both health and the environment.

5. Mr. Freeman estimated there are about 3,200 chemical drums in the area. Some of the drums were observed to be leaking, and damaged or rusty. He also indicated that Harshaw is interested in this property. He is just waiting for the right offer from Harshaw.

6. Leachate coming from the property was visible.

7. The site appeared very congested, full of chemical drums stacked all over the place, very poor housekeeping and an apparent lack of proper labeling of most of the drums. Mr. Freeman's assistant, Bob Spears acknowledged that the labels on most of the drums do not indicate their actual contents.

8. The plant, in a 3 acre land, is situated in a congested industrial area with apartment complexes not too far from the site.

9. It was indicated to us that the company plans to reduce drum inventory to bare minimum and to concentrate more on bulk handling, i.e., tank farms and tank trucks will be used more.

Additional samples were collected. These will be tested primarily for flash point data.

cc: Miner
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